

Indian Institute of Technology Gandhinagar LIBRARY



List of Ph.D. & M. Tech Theses Accession No.: T00691-T00931 (New Additions in 2021)

To see this collection in Institutional Repository please visit this link:
<https://repository.iitgn.ac.in/community-list>

PhD Theses	
Discipline	Total
Biological Engineering	09
Chemical Engineering	05
Chemistry	12
Civil Engineering	05
Computer Science and Engineering	05
Earth Science	05
Electrical Engineering	14
Humanities and Social Science	05
Materials Engineering	03
Mathematics	01
Mechanical Engineering	04
Physics	18
Total	86

M.Tech Theses	
Discipline	Total
Biological Engineering	17
Chemical Engineering	12
Civil Engineering	31
Computer Science and Engineering	08
Earth Science	09
Electrical Engineering	48
Materials Engineering	11
Mechanical Engineering	19
Total	155

Table of Contents

LIST OF PHD THESES

BIOLOGICAL ENGINEERING	5
CHEMICAL ENGINEERING.....	6
CHEMISTRY.....	7
CIVIL ENGINEERING.....	8
COMPUTER SCIENCE AND ENGINEERING	9
EARTH SCIENCE	10
ELECTRICAL ENGINEERING	10
HUMANITIES AND SOCIAL SCIENCE	12
MATERIALS ENGINEERING	13
MATHEMATICS.....	13
MECHANICAL ENGINEERING.....	14
PHYSICS	14

LIST OF M.TECH THESES

BIOLOGICAL ENGINEERING	18
CHEMICAL ENGINEERING.....	20
CIVIL ENGINEERING.....	21
COMPUTER SCIENCE AND ENGINEERING	25
EARTH SCIENCE	26
ELECTRICAL ENGINEERING	28
MATERIALS ENGINEERING	33
MECHANICAL ENGINEERING.....	35

LIST OF PHD THESES

LIST OF PHD THESES

BIOLOGICAL ENGINEERING

1. **Title** : Crystal Engineering of poorly water-soluble drugs
Author : Indumathi, S
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 548 IND
Acc. No. : T00692

2. **Title** : Biochemical and Bioinformatic studies of THAP9 transposase and other THAP proteins
Author : Sanghavi, Hiral M.
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 570.285 SAN
Acc. No. : T00694

3. **Title** : Mechanisms of DNA binding and transposition by THAP9
Author : Sharma, Vasudha
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 572.869 SHA
Acc. No. : T00698

4. **Title** : Reservoir based co-delivery of CuO nanoparticles and Elesclomol to facilitate enhanced dissolution mediated intracellular oxidative stress
Author : Chakraborty, Swaroop
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 574 CHA
Acc. No. : T00699

5. **Title** : Functional relevance of subtle patterns of cytosine methylation: a regulatory framework of human CGGBP1
Author : Patel, Manthan
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 574 PAT
Acc. No. : T00695

6. **Title** : Modulatory crosstalk between chromatin components: the CGGBP1-CTCF axis
Author : Patel, Divyesh
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 574 PAT
Acc. No. : T00696

7. **Title** : Molecular mechanism of intracellular cargo transport system
Author : Nishaben Patel
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 574.22 PAT
Acc. No. : T00697
8. **Title** : Investigation of protein-protein interactions in Tuberous Sclerosis Complex (TSC) and structural identification of Netrin-NTR
Author : Natarajan, Nalini
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 618.928 NAT
Acc. No. : T00693

CHEMICAL ENGINEERING

1. **Title** : Design of self-oscillating chemical reactions catalyzed by nanoparticle-graphene composites and their utility in locomotion, sensing and detection
Author : Kumar, D Jaya Prasanna
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 660 KUM
Acc. No. : T00722
2. **Title** : Rheology and microstructure of fumed, colloidal particles suspended in isotropic and anisotropic media: role of particle shape, surface chemistry and applied external fields
Author : Kumar, Saket
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 660 KUM
Acc. No. : T00725
3. **Title** : Particle formation of poorly water soluble drugs & their incorporation into polymeric films for enhanced oral & transdermal drug delivery
Author : Pandey, Komal
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 660 PAN
Acc. No. : T00723
4. **Title** : Crystallization of active pharmaceutical ingredients: implications of intermolecular interactions on morphology and polymorphism
Author : Prasad, Rupanjali Gurprasad
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 660 PRA
Acc. No. : T00724
5. **Title** : Butylated urea formaldehyde resins: reaction mechanisms, kinetic model and multi-objective optimization based reactor design
Author : Amin, Shital A.
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 668 AMI
Acc. No. : T00721

CHEMISTRY

- Title** : Design, synthesis, and identification of novel kinase inhibitors: biological and structural studies
Author : Ali, Afsar
Publisher : Gandhinagar : Indian Institute of Technology, 2021
Call No. : 540 ALI
Acc. No. : T00717
- Title** : Bio-inspired catalyst design strategies for activating dormant transition metal cores for hydrogen evolution
Author : Khandelwal, Shikha
Publisher : Gandhinagar: Indian Institute of Technology, 2019
Call No. : 540 KHAT
Acc. No. : T00720
- Title** : Design and synthesis of organic fluorescent molecules: sensing, cellular imaging and organogels
Author : Jana, Palash
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 540 JAN
Acc. No. : T00710
- Title** : Synthesis and studies of new myo-inositol and phenothiazine derivatives as next-generation protein kinase inhibitors
Author : Javeena
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 540 JAV
Acc. No. : T00712
- Title** : Precise and in-situ control of surface plasmon resonance of gold nanorods via post-synthesis modifications
Author : Thambi, Varsha
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 540 THA
Acc. No. : T00716
- Title** : Asymmetric syntheses of substituted- γ -butyrolactones: application to the total syntheses of natural products
Author : Madhukar, Sarkale Abhijeet
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 540 MAD
Acc. No. : T00713
- Title** : New and emergent motifs in drug development: inhibition of enzymes sphingosine kinase 1, carbonic anhydrase VA and soluble epoxide hydrolase, and potent antibiotics
Author : Mahapatra, Amarjyoti Das
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 540 MAH
Acc. No. : T00709

8. **Title** : Synthesis and studies of luminescent metal dipyrinates: NIR emitters for application as triplet sensitizers in photo-dynamic therapy
Author : Manav, Neha
Publisher : Gandhinagar : Indian Institute of Technology, 2020
Call No. : 540 MAN
Acc. No. : T00715
9. **Title** : Development of asymmetric organocatalytic methodologies and their applications to the syntheses of bioactive natural products
Author : Maurya, Vidyasagar
Publisher : Gandhinagar : Indian Institute of Technology, 2021
Call No. : 540 MAU
Acc. No. : T00718
10. **Title** : Modulating the photo and electro-catalytic small molecule activations by Cobaloximes with enzyme-inspired ligand design
Author : Mir, Ab Qayoom
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 540 MIR
Acc. No. : T00719
11. **Title** : Synthesis and application of Trans A2B2 porphyrins for photocatalysis, energy transfer, and photodynamic therapy
Author : Pandey, Vijayalakshmi
Publisher : Gandhinagar : Indian Institute of Technology, 2020
Call No. : 540 PAN
Acc. No. : T00714
12. **Title** : Computational approach to systematically compare protein phosphorylation and O-GlcNAcylation
Author : Rani, Lata
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 540 RAN
Acc. No. : T00711

CIVIL ENGINEERING

1. **Title** : Drought risk in South Asia under observed and projected future climate
Author : Aadhar, Saran
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 624 AAD
Acc. No. : T00701
2. **Title** : Small and large strain shear characteristics of compacted high plasticity clay subjected to static and dynamic loading
Author : Kantesaria, Naman Pranilal
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 KAN
Acc. No. : T00703

3. **Title** : Detection of blockages in a pipeline using fluid transients
Author : Kumar, Prabhat
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624.19 KUM
Acc. No. : T00704

4. **Title** : Geotechnical and structural modulation for strength and adsorption enhancement of urban sewage sludge
Author : Taki, Kaling
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 624.19 TAK
Acc. No. : T00702

5. **Title** : Studying planar and spatial dam breach hydraulics
Author : Kaurav, Rajkumari
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 627.8 KAU
Acc. No. : T00700

COMPUTER SCIENCE AND ENGINEERING

1. **Title** : Deep feature learning: training with no prior examples and its applications
Author : Mastan, Indra Deep
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 004.6 MAS
Acc. No. : T00728

2. **Title** : Algorithms and space efficient representations for finite groups
Author : Sharma, Shivdutt
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 005.73 SHA
Acc. No. : T00729

3. **Title** : Fair multiparty computation using blockchain
Author : Shrivastava, Ananya
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 005.82 SHR
Acc. No. : T00727

4. **Title** : Streaming coresets for machine learning algorithms
Author : Shit, Supratim
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 006.31 SHI
Acc. No. : T00730

5. **Title** : Challenges in deep visual recognition: algorithms and novel architectures
Author : Kumawat, Sudhakar
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 006.42 KUM
Acc. No. : T00726

EARTH SCIENCE

1. **Title** : Topographic variability across a tectonically passive margin and its process dynamics at millennial timescale: a landscape to landform-scale study of the Western Ghat escarpment, India
Author : Guha, Shantamoy
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 550 GUH
Acc. No. : T00746

2. **Title** : Understanding hydrometeorological processes concerning Indian precipitation: insights from oxygen and hydrogen stable isotopes in conjunction with meteorological parameters
Author : Oza, Harsh
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 550 OZA
Acc. No. : T00748

3. **Title** : High resolution paleoclimatic study using corals
Author : Raj, Harsh
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 551.6 RAJ
Acc. No. : T00747

4. **Title** : Biogeochemistry of dissolved aluminium and manganese in the Indian ocean
Author : Singh, Naman Deep
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 577.14 SIN
Acc. No. : T00749

5. **Title** : Rate of chemical weathering in tropical region and its controlling factors: small catchment perspective from Western India
Author : Prasad, Ravi Kant
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.3 PRA
Acc. No. : T00745

ELECTRICAL ENGINEERING

1. **Title** : Development of energy management frameworks for der integration in distribution networks
Author : Kiran, P. Bala Sai
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.042 KIR
Acc. No. : T00739

2. **Title** : Magnetic equivalent circuit incorporating core saturation and rotor motion, and a method for mitigating subharmonics in surface-mounted PMSM
Author : Bhashini, Manju V.
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 BHA
Acc. No. : T00732

3. **Title** : Approximate designs and frameworks for error resilient applications
Author : Jha, Chandan Kumar
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.3 JHA
Acc. No. : T00742

4. **Title** : Source device identification systems for printed documents and digital images
Author : Joshi, Sharad
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.3 JOS
Acc. No. : T00740

5. **Title** : Right invertibility and relative degree in tracking control: theory and tools
Author : Sujay Dilip, Kadam
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 SUJ
Acc. No. : T00735

6. **Title** : Linearity enhancement techniques in high resolution pipelined ADCs
Author : Mohapatra, Satyajit
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.3 MOH
Acc. No. : T00738

7. **Title** : Opportunistic context-aware energy-efficient embedded memory solutions
Author : Surana, Neelam
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.3 SUR
Acc. No. : T00737

8. **Title** : Compression history estimation and source identification for image and audio forensics
Author : Verma, Vinay
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 VER
Acc. No. : T00736

9. **Title** : Designing photonic nanostructures for compact, high performance refractometric sensing
Author : Vyas, Hardik Shyam
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.365 VYA
Acc. No. : T00744

10. **Title** : Non-invasive detection of microbial growth using tunable diode laser spectroscopy and its application to assess bacterial traits
Author : Zarin A S
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.366 ZAR
Acc. No. : T00733
11. **Title** : Investigating motion in image sequences: detection, removal, and inference
Author : Kanojia, Gagan.
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.367 KAN
Acc. No. : T00731
12. **Title** : Fast and low complexity adaptive signal processing algorithms for digital hearing aids
Author : Bhattacharjee, Sankha Subhra
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.38223 BHA
Acc. No. : T00743
13. **Title** : Parameterized complexity of permutation group factorization and related problems
Author : Vaidyanathan, P. R.
Publisher : Gandhinagar: Indian Institute of Technology, 2019
Call No. : 621.39 VAI
Acc. No. : T00691
14. **Title** : Grid-integration of large-scale wind power generation with battery energy storage system
Author : Abhinav, Rishabh.
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.45 ABH
Acc. No. : T00734
15. **Title** : Fiber Bragg grating sensor-based glove to accurately measure finger flexure
Author : Jha, Chandan Kumar
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 681.25 JHA
Acc. No. : T00741

HUMANITIES AND SOCIAL SCIENCE

1. **Title** : How expectation and statistical learning shape attentional selection
Author : George, Nithin
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 153.4 GEO
Acc. No. : T00706
2. **Title** : Virtual reality based joint attention task platforms for individuals with autism
Author : Jyoti, Vishav
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 153.4 JYO
Acc. No. : T00708

3. **Title** : Action planning in response to affective stimuli
Author : Mehta, Veli Milind
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 153.4 MEH
Acc. No. : T00707

4. **Title** : Interlimb generalization of newly learned motor skills
Author : Yadav, Goldy
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 153.4 YAD
Acc. No. : T00705

5. **Title** : Representation and lived experience(s) of Dalits in visual and verbal mediums
Author : Ingole, Prashant
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 305.5688 ING
Acc. No. : T00750

MATERIALS ENGINEERING

1. **Title** : Antibacterial properties of Octaarginine-complexed hydrophobic drugs
Author : Ratrey, Poonam.
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 615.1 RAT
Acc. No. : T00757

2. **Title** : Reactivity mediated energetics transformation of oxide based nanoparticles: critical determinant towards nanosafety
Author : Paruthi, Archini.
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 620.115 PAR
Acc. No. : T00758

3. **Title** : Microstructure influenced variation in the electronic properties of the functional materials: the case of Nb doped anatase and TbFe₂
Author : Manwani, Krishna
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.37 MAN
Acc. No. : T00756

MATHEMATICS

1. **Title** : Generalized Hurwitz zeta and modified Bessel functions and associated modular relations
Author : Kumar, Rahul
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 515.53 KUM
Acc. No. : T00751

MECHANICAL ENGINEERING

- Title** : Experimental investigations and prediction modelling of texture and thermo-physical changes during thermal processing of hygroscopic food materials
Author : Sinha, Ankita
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621 SIN
Acc. No. : T00536
- Title** : Ethanol autothermal reforming on Rh/CeO₂ catalyst: experimental and numerical studies
Author : Baruah, Renika
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 BAR
Acc. No. : T00752
- Title** : Mechanisms and neural substrates underlying the acquisition of effector-independent motor memories
Author : Kumar, Adarsh
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 KUM
Acc. No. : T00755
- Title** : Determination of the thermophysical properties of Al₂O₃-CO₂ nanofluid: a molecular dynamics approach
Author : Ahmed, Zeeshan
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.4 AHM
Acc. No. : T00754

PHYSICS

- Title** : Infrared astronomical instrumentation and polarisation studies
Author : Rai, Archita
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 522.2 RAI
Acc. No. : T00764
- Title** : Understanding the properties of accretion powered Be/X-ray binary pulsars
Author : Gupta, Shivangi
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 522.6863 GUP
Acc. No. : T00765
- Title** : Multiwavelength polarimetry of astrophysical sources
Author : Aarthy, E
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 523.01 AAR
Acc. No. : T00763

3. **Title** : Warm inflationary universe at the large and the small scales
Author : Arya, Richa
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 530 ARY
Acc. No. : T00769

4. **Title** : Structure and dynamics of scientific collaboration networks of Indian researchers in APS publications
Author : Singh, Chakresh Kumar
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 530 SIN
Acc. No. : T00761

5. **Title** : Phenomenology of neutrino oscillations and masses
Author : Chakraborty, Kaustav
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 530.127 CHA
Acc. No. : T00774

6. **Title** : Solar origin of space weather
Author : Sarkar, Ranadeep
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 530.1278 SAR
Acc. No. : T00773

7. **Title** : Probing New Physics with hadronic final states at the Large Hadron Collider
Author : Bhardwaj, Akanksha
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 530.1298 BHA
Acc. No. : T00768

8. **Title** : Laser induced breakdown spectroscopy utilising synthetic spectrum method for optically thick plasmas
Author : Kumar, Prashant
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 530.179 KUM
Acc. No. : T00775

9. **Title** : Daytime thermospheric neutral wave dynamics over low- and equatorial-latitudes
Author : Mandal, Subir
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 530.189 MAN
Acc. No. : T00770

10. **Title** : Dynamics of heavy quark in a medium
Author : Singh, Balbeer
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 530.697 SIN
Acc. No. : T00771

11. **Title** : Improving low-latency gravitational wave search pipeline using numerical linear algebra
Author : Reza, Amit
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 539.754 REZ
Acc. No. : T00760
12. **Title** : Aspects of gravitational wave astronomy with coalescing compact binary sources
Author : Roy, Soumen
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 539.754 ROY
Acc. No. : T00759
13. **Title** : Investigation of martian dust devil characteristics
Author : Uttam, Shefali
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 551.51 UTT
Acc. No. : T00767
14. **Title** : Emission and atmospheric variability of volatile organic compounds over the Indian subcontinent and surrounding oceanic regions
Author : Tripathi, Nidhi
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 570 TRI
Acc. No. : T00766
15. **Title** : Hot QCD matter in the influence of electromagnetic fields
Author : Kurian, Manu
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 530.128 KUR
Acc. No. : T00776
16. **Title** : Selective adaptation to task- relevant sensory prediction errors
Author : Shingane, Somesh Nana
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 574 SHI
Acc. No. : T00777
17. **Title** : Dynamical processes in brain networks: mass modelling approaches
Author : Tripathi, Richa
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 612.82 TRI
Acc. No. : T00762
18. **Title** : Aspects of astroparticle physics in the precision measurement era
Author : Ashish
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 630.897 ASH
Acc. No. : T00772

LIST OF M. TECH THESES

LIST OF M.Tech THESES

BIOLOGICAL ENGINEERING

- Title** : Point Mutation Analysis of Gamma Secretase Activating Protein (GSAP)
Author : Patel, Adarsh
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 500 PAT
Acc. No. : T00779
- Title** : Small molecules in cellular physiology and cell imaging
Author : Haque, Ashadul
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 570 HAQ
Acc. No. : T00782
- Title** : Studying heparin and octadecyl sulphate induced aggregation models of tau isoforms
Author : Bansal, Aakriti
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 570 BAN
Acc. No. : T00778
- Title** : CGGBP1 and Its Role in the Stability and Formation of G-quadruplex in vitro
Author : Ghosh, Chandrama
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 570 GHO
Acc. No. : T00786
- Title** : Effect of Carbamylation on The Aggregation of N-Terminal Huntingtin Protein Fragment
Author : Halder, Tanusree
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 570 HAL
Acc. No. : T00793
- Title** : Exploring the Enzymology and Structural Biology of Eukaryotic and Prokaryotic Enzymes Crucial to the Development of Cancer
Author : Mukherjee, Bodhidipra
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 570 MUK
Acc. No. : T00784
- Title** : Design, synthesis and in silico assessment of isoform selective Sphingosine Kinase Inhibitors
Author : Pandit, Shiny
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 570 PAN
Acc. No. : T00791

8. **Title** : Hydrolytic enzyme-assisted mass spectrometric investigation of processed food matrices
Author : Patel, Axita
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 570 PAT
Acc. No. : T00783

9. **Title** : Carbamylated Lysine based Peptide Amphiphiles: Assembly, Characterization and Application
Author : Paul, Tamalika
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 570 PAU
Acc. No. : T00792

10. **Title** : In vitro characterization of singlet oxygen generating sonosensitizers for sonodynamic therapy
Author : Roy, Jayishnu
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 570 ROY
Acc. No. : T00787

11. **Title** : Identification of target E3 ligase using C-terminal Amyloid Precursor Protein derived peptide fragment
Author : Selvaraj, Akshaya
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 570 SEL
Acc. No. : T00780

12. **Title** : Role of retrograde motor proteins in endocytosis and maintenance of morphology of cellular organelles
Author : Sinha, Pankhuri
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 570 SIN
Acc. No. : T00790

13. **Title** : Estimating binding affinity of HpIMPDH and optimization of crystallization condition
Author : Yadav, Pankaj
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 570 YAD
Acc. No. : T00789

14. **Title** : Selective adaptation to task- relevant sensory prediction errors
Author : Shingane, Somesh Nana
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 574 SHI
Acc. No. : T00777

15. **Title** : Biomedical ultrasound modulates cellular endocytosis and physiology
Author: Bansal, Kahkashan
Author : Bansal, Kahkashan
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 616.07543 BAN
Acc. No. : T00788

16. **Title** : Viscoelastic polyvinyl alcohol (PVA) phantoms for ultrasound elastography
Author : Sharma, Ananya
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 616.07543 SHA
Acc. No. : T00781
17. **Title** : Evolutionary Analysis, Homology modelling, Cloning and Expression of Human THAP9 Transposase
Author : Nandi, Chandan
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660.65 NAN
Acc. No. : T00785

CHEMICAL ENGINEERING

1. **Title** : Shape memory properties of polymer- magnetic nanoparticle blends
Author : Patel, Niraliben
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660 PAT
Acc. No. : T00835
2. **Title** : Simulation of self-moving Belousov- Zhabotinsky reaction droplets using Lattice Boltzmann Method
Author : Borkar, Chaitra
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 BOR
Acc. No. : T00826
3. **Title** : Improving CO₂ capture capacity of CaO-based sorbent using metal oxide nano-particles
Author : Mishra, Amit Kumar
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660 MIS
Acc. No. : T00836
4. **Title** : Studying unfolding behaviour of γ -d crystallin using molecular dynamics simulations
Author : Ashokbhai, Sojitra Kandarp
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660 ASH
Acc. No. : T00828
5. **Title** : Aqueous nanosuspensions of poorly water-soluble drug using solidification of hot melt emulsions
Author : Endeshaw, Meketaye A.
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 660 END
Acc. No. : T00830
6. **Title** : MgB₂ Derived 2D-Nanosheets for H₂ Storage and H₂ Generation
Author : Gupta, Arvind Kr
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660 GUP
Acc. No. : T00825

7. **Title** : Evaluating the candidacy of titanium diboride (TiB₂) derived nanosheets as additives to enhance the CO₂ capturing ability of calcium oxide (CaO)
Author : Jani, Vruddhi
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660 JAN
Acc. No. : T00833
8. **Title** : Multi-objective dynamic optimization study of an industrial scale fermentation process
Author : Patidar, Bhowmick
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660 PAT
Acc. No. : T00834
9. **Title** : Using chemical patterns to alter the solid- fluid interfacial entropy without affecting solid-fluid interfacial free energy
Author : Saketharam, Reddy N
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660 SAK
Acc. No. : T00832
10. **Title** : Enhanced seed germination and plant growth using aqueous microbubble suspensions
Author : Shrivastava, Mayank
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660 SHR
Acc. No. : T00829
11. **Title** : Modelling and design of supercapacitor using molecular dynamics simulations and experimental techniques
Author : Shukla, Gourav
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660 SHU
Acc. No. : T00827
12. **Title** : Influence of pH, heating, and sucrose addition on ovalbumin stabilized Soya- bean Oil in water Emulsion Gels
Author : Singhal, Rachna
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660 SIN
Acc. No. : T00831

CIVIL ENGINEERING

1. **Title** : Adsorption of the methylene blue from aqueous solution using geopolymers mortar grains in a fixed-bed columns
Author : Ajay Chandran P V
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 AJA
Acc. No. : T00795

2. **Title** : Evaluating resilience of water distribution network in realistic urban setting under seismic hazard
Author : Chandrakar, Pranav
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 CHA
Acc. No. : T00815
3. **Title** : Characterisation of fire behaviour in public transport buses
Author : Pavithra C T
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 PAV
Acc. No. : T00814
4. **Title** : Ensemble streamflow prediction in Narmada River Basin, India: comparison of two operational weather forecast products
Author : Devenbhai, Vegad Urmin
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 DEV
Acc. No. : T00808
5. **Title** : Response of unreinforced masonry-infilled RC frames with failure in infill dominated
Author : Dewangan, Himanshi
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 DEW
Acc. No. : T00794
6. **Title** : Role of internal variability in hydropower generation potential in changing demand scenario
Author : Dixit, Sudhanshu
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 DIX
Acc. No. : T00806
7. **Title** : Mechanical behavior of micaceous sand treated with lime, bentonite and kaolinite
Author : Fayaz, Zarnain
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 FAY
Acc. No. : T00818
8. **Title** : Proportioning elastomeric bearings in a seismically isolated building with horizontal and vertical setbacks and torsional irregularities
Author : Haridas, Spandhana M.
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 HAR
Acc. No. : T00816
9. **Title** : Shrinkage, swelling, cracking and shear strength response of expansive soil stabilized with fly ash and lime
Author : Hiteshkumar, Shah Jahnavi
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 HIT
Acc. No. : T00812

10. **Title** : Seismic performance of RC frames with unreinforced masonry infills
Author : Jain, Ankush
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 JAI
Acc. No. : T00823
11. **Title** : Evaluation of meteorological forecast skill for flood prediction in Brahmaputra river basin
Author : Kale, Akash Ravindra
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 KAL
Acc. No. : T00803
12. **Title** : Efficacy of horizontal seismic isolation in a generic fast breeder reactor
Author : Khan, Mohammed Salim D.
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 KHA
Acc. No. : T00821
13. **Title** : Understanding the evolution of interstate trade network using complex network framework
Author : Kulkarni, Sujata S
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 KUL
Acc. No. : T00807
14. **Title** : Understanding the seismic performance of a fiber reinforced concrete building
Author : Mahagaonkar, Suvil
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 624 MAH
Acc. No. : T00799
15. **Title** : Understanding the seismic performance of a fiber reinforced concrete building
Author : Mahagaonkar, Suvil
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 MAH
Acc. No. : T00805
16. **Title** : Developing design charts for reinforced concrete shear walls with and without boundary elements
Author : Menon, Aiswarya
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 MEN
Acc. No. : T00810
17. **Title** : Structural damage detection through ambient signatures
Author : Mittal, Abhi
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 MIT
Acc. No. : T00822
18. **Title** : Effect of rainwater harvesting on soil erosion in Imphal City
Author : Ngasepam, Jayalaxmi
Publisher : Gandhinagar: Indian Institute of Technology, 2021

- Call No.** : 624 NGA
Acc. No. : T00813
19. **Title** : Drag coefficients for a high-voltage delta- configuration lattice transmission tower segment
Author : Oza, Parthesh S.
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 OZA
Acc. No. : T00801
20. **Title** : On the occurrence of the observed worst flood in Mahanadi River basin under the warming climate
Author : Pandey, Deeptija
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 PAN
Acc. No. : T00804
21. **Title** : Estimation of normal, inverse, and irregular earth profiles using different global optimization techniques from active MASW
Author : Paul, Somnath
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 PAU
Acc. No. : T00824
22. **Title** : Soil moisture and streamflow data assimilation for streamflow prediction in Narmada River basin
Author : Prakash, Ved
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 PRA
Acc. No. : T00809
23. **Title** : An evaluation of strategies to enhance the resilience of power transmission network in the state of Odisha, India
Author : Raj, Surender V
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 RAJ
Acc. No. : T00802
24. **Title** : On improved seismic performance of reinforced concrete structures using steel fiber reinforcement—analytical feasibility study
Author : Rajput, Tarun Singh
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 RAJ
Acc. No. : T00817
25. **Title** : Quantitative analysis and understanding of building fires in India
Author : Renjini, R
Publisher : Gandhinagar Indian Institute of Technology, 2021
Call No. : 624 REN
Acc. No. : T00820
26. **Title** : Effect of guar gum biopolymer on shear strength, cyclic and durability response of class-f fly ash

- Author** : Saxena, Ashray
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 SAX
Acc. No. : T00811
27. **Title** : Effect of moisture content, density, rubber and plastic waste on interface shear behavior of marginal soil- geosynthetic system
Author : Shandilaya, Shivesh
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 624 SHA
Acc. No. : T00798
28. **Title** : Characterisation of fire behaviour inside non-AC rail coach
Author : Shah, Drashti
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624 SHA
Acc. No. : T00819
29. **Title** : Evaluation of different optimisation methods in MASW interpretation and determination of shear wave velocity profile using multi-sensor configuration analysis
Author : Shivani, Lovkesh
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 624 SHI
Acc. No. : T00796
30. **Title** : Seismic coefficients for design of geosynthetic reinforced soil wall with soil non-linearity effect and different foundation soils
Author : Sahil Wani
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 624 SAH
Acc. No. : T00797
31. **Title** : Influence of infill masonry on seismic performance of RC buildings
Author : Bharadwaj, Kartikeya
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 693.1 BHA
Acc. No. : T00800

COMPUTER SCIENCE AND ENGINEERING

1. **Title** : Generating X from the embedding of images and text
Author : Singh, Prajwal Kumar
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 SIN
Acc. No. : T00626
2. **Title** : Solar energy forecasting using machine learning
Author : Bankoti, Jaideep Singh
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 BAN
Acc. No. : T00838

3. **Title** : Single edge fault tolerant source-wise multiplicative spanner
Author : Basha, Shaik Mahaboob Jani
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 BAS
Acc. No. : T00842
4. **Title** : Fast Deblurring cGAN
Author : Kumar, Jatin
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 KUM
Acc. No. : T00839
5. **Title** : Fair Representative Clustering
Author : Kumari, Jyoti
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 KUM
Acc. No. : T00840
6. **Title** : Siamese network performance gain in the face of data scarcity
Author : Podder, Utpal
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 POD
Acc. No. : T00843
7. **Title** : Comparative study of correlation clustering algorithms
Author : Srikrishnan, Sreejith
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 SRE
Acc. No. : T00837
8. **Title** : Uncertainty quantification using bayesian neural networks: application to plant disease detection and physics guided machine learning
Author : Vagadiya, Jenilkumar Virendra
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 VAG
Acc. No. : T00844

EARTH SCIENCE

1. **Title** : Morphometric analysis of river basins in different climatic and geological settings
Author : Mishra, Subhashis
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 338.1752 MIS
Acc. No. : T00901
2. **Title** : Gully mapping and its control in the Sabarmati river and Mahi river basin
Author : Patni, Samrat
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 338.17521 PAT
Acc. No. : T00900

3. **Title** : Identifying lithology specific tracers for submarine groundwater discharge and evaluating associated metal flux along the southern coast of Gujarat
Author : Misra, Anant
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 339.410 MIS
Acc. No. : T00894
4. **Title** : On the causes of tropical cyclone driven floods in India
Author : Rajeev, Akshay
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 363.3493 RAJ
Acc. No. : T00893
5. **Title** : Exploring climate and tectonic imprint on surface processes and landscape evolution in great Rann of Kutch
Author : Gogoi, Arindom
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 550.001 GOG
Acc. No. : T00895
6. **Title** : Aggregation kinetics of black carbon nanoparticles in aquatic environment: implications of solution chemistry and humic acid
Author : Dhangar, Kiran Barasu
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 574.925 DHA
Acc. No. : T00898
7. **Title** : Active tectonic control on growth of the frontal fold-and-thrust belt in Jammu sector of the Western Himalaya
Author : Nath, Debashis
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 577.09545 NAT
Acc. No. : T00896
8. **Title** : Artificial neural network based ground motion model for significant duration calibrated on Japanese KIK-NET database
Author : Himanshu
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 616.4 HIM
Acc. No. : T00897
9. **Title** : Investigation of the relationship between geomorphological indices and sensitivity analysis of hypsometry and its property to polynomial order in the Nahan salient
Author : Jain, Nitin
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 915.4960 JAI
Acc. No. : T00899

ELECTRICAL ENGINEERING

1. **Title** : GAN based approaches for polyp segmentation and human face age progression
Author : Vamsi Krishna, Vasa
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 133.5 VAM
Acc. No. : T00886
2. **Title** : Energy management framework in active distribution network
Author : Singh, Satish Kumar
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 333.7914252 SIN
Acc. No. : T00880
3. **Title** : Robust & sparsity aware distributed estimation for wireless sensor networks
Author : Nautiyal, Mayank
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 362.10 NAU
Acc. No. : T00868
4. **Title** : In-memory computing using embedded DRAM's
Author : Borkar, Rajat
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 369.714 BOR
Acc. No. : T00874
5. **Title** : Robust 6T SRAM based in-memory computing
Author : Puri, Naveen
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 571.2658 PUR
Acc. No. : T00869
6. **Title** : Virtual reality based exergaming platform for quantifying the dexterity and range of motion of upper limb
Author : Rajput, Gajendra Singh
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 579.6598 RAJ
Acc. No. : T00861
7. **Title** : Design of portable, individualized audio, visual and tactile cueing modules
Author : Bhongade, Amit
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.3 BHO
Acc. No. : T00845
8. **Title** : Numerical analysis of quantum effects on advanced NsFET
Author : Dubey, Abhilash
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 DUB
Acc. No. : T00852

9. **Title** : Deep neural networks for single image light field synthesis and polyp segmentation from endoscopy images
Author : Gudiboina, Karthik Kumar
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 GUD
Acc. No. : T00865
10. **Title** : Study of optimally located EV charging stations for frequency control service in distribution network
Author : Hasan, Syed Nafiz
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.3 HAS
Acc. No. : T00850
11. **Title** : Understanding handwriting performance with a computerized pressure-tablet based dot-guided spiral drawing task platform
Author : Khandelwal, Kumar Bhanu.
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.3 KHA
Acc. No. : T00847
12. **Title** : Hyperbolic secant robust sparse adaptive filters
Author : Kumar, Sonu
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.3 KUM
Acc. No. : T00849
13. **Title** : Deep learning assisted accelerated analysis of interconnects for high performance ICs
Author : Sujatha, J
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.3 SUJ
Acc. No. : T00848
14. **Title** : Phasor data correction and transmission system state estimation under spoofing attacks
Author : Tharzeen, Aabila
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 THA
Acc. No. : T00851
15. **Title** : Process induced threshold voltage variability in Ultra-Thin Body and Buried Oxide Fully Depleted Silicon on Insulator (UTBB FDSOI) transistors
Author : Verma, Ankit Kumar
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3 VER
Acc. No. : T00846
16. **Title** : System-level analysis of dual node upset tolerant flip-flops
Author : Agarwal, Ayush
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3002 AGA
Acc. No. : T00858

17. **Title** : Blockchain-based network aware peer-to-peer energy trading framework
Author : Brijkumar, Jain Jainendra
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.301 BRI
Acc. No. : T00864
18. **Title** : Device design of indigenous low cost single, double-poly silicon bipolar transistors for Analog and RF applications
Author : Katiyar, Ravins
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3017 KAT
Acc. No. : T00877
19. **Title** : Effect of channel dimensions and spacer material on drain saturation voltage ($V_{DS,SAT}$) of sub-10nm Wf in regime FinFETs
Author : Sharma, Pratik
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3041 SHA
Acc. No. : T00892
20. **Title** : Shunt active filters with active current reference derived from (P - Q) and (Id - Iq) methods
Author : Aditya, Pandrangi
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.31781 ADI
Acc. No. : T00890
21. **Title** : Multiobjective optimization based automated demand response model in smart distribution grid
Author : Sharma, Priyanka Vinodkumar
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.319 SHA
Acc. No. : T00891
22. **Title** : Sparsity aware robust kernel adaptive filters for audio signal processing
Author : Pandey, Rajlaxmi
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3201547 PAN
Acc. No. : T00876
23. **Title** : Linear electric motors for low-speed low-power applications
Author : Shah, Henil
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.365 SHA
Acc. No. : T00863
24. **Title** : Frameworks for implementing neural network inference engines
Author : Kumar, Rajesh
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3701 KUM
Acc. No. : T00875

25. **Title** : Robust and high-performance in-memory computing using dual port DICE SRAM
Author : Dhandamudi, Roshni
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 621.37268 DHA
Acc. No. : T00878
26. **Title** : Crater detection and classification using unsupervised and supervised approaches
Author : Jain, Sajal Kumar
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3741 JAI
Acc. No. : T00879
27. **Title** : Conditional generative adversarial networks for the synthesis of microscopic image
Author : Rakshitha, Ailneni
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.381 RAK
Acc. No. : T00854
28. **Title** : Development of a scalable substrate current model for LDMOS transistor
Author : Dan, Virender
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3815 DAN
Acc. No. : T00887
29. **Title** : Design and analysis of DD coupler with LCC compensation for wireless power transfer
Author : Singhal, Shivani
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.413 SIN
Acc. No. : T00881
30. **Title** : Framework to address practical challenges of active learning methodologies
Author : Srivastava, Pravesh
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.6845 SRI
Acc. No. : T00871
31. **Title** : Deep learning approach for image motion deblurring and dense crowd surveillance
Author : Gunjal, Shrihari
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.712 GUN
Acc. No. : T00882
32. **Title** : Radiation hardened memory cell design and verification of memory macros at RTL level
Author : Agarwal, Tushar
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.7124 AGA
Acc. No. : T00885
33. **Title** : Transformer winding deformation analysis using SFRA
Author : Singh, Aparna
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.741 SIN
Acc. No. : T00857

34. **Title** : Portable and wearable personality evaluator
Author : Singh, Vivek
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.841 SIN
Acc. No. : T00888
35. **Title** : Acoustic characterization and imaging of a protein-shelled ultrasound contrast agent
Author : Suresh, Boyapati
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.96341 SUR
Acc. No. : T00860
36. **Title** : Densely connected network architectures and smart sampling techniques for nanoscale design structures
Author : Tandan, Harshul
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 627.5639 TAN
Acc. No. : T00862
37. **Title** : Synchronous to asynchronous conversion for non-linear pipelined processor
Author : Shah, Smit
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 627.80412 SHA
Acc. No. : T00884
38. **Title** : Design and analysis of fast charging technology for electric vehicle batteries
Author : Verma, Siddharth
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 629.2293 VER
Acc. No. : T00883
39. **Title** : Range optimization for electric vehicle by exploring performance limits
Author : Kukadiya, Purna
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 629.2502 KUK
Acc. No. : T00872
40. **Title** : Approximation techniques for image processing and low power deep neural networks
Author : Tej, Bachu Varun
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 629.732 TEJ
Acc. No. : T00859
41. **Title** : Single LDR to HDR image translation using conditional GAN
Author : Raipurkar, Prarabdh
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 642.3621 RAI
Acc. No. : T00870
42. **Title** : Design of a clock driver circuit for CCDs using indigenous LDMOS transistors
Author : Dhote, Pushpak E.

Publisher : Gandhinagar: Indian Institute of Technology, 2021

Call No. : 651.8791 DHO

Acc. No. : T00873

43. **Title** : Automation testing and traffic sign classification with modified residual networks

Author : Singh, Abhishek Kumar

Publisher : Gandhinagar: Indian Institute of Technology, 2021

Call No. : 653.17 SIN

Acc. No. : T00853

44. **Title** : Design of energy efficient and radiation tolerant content addressable memories

Author : Kumar, Anoop

Publisher : Gandhinagar: Indian Institute of Technology, 2021

Call No. : 654.145 KUM

Acc. No. : T00855

45. **Title** : Deep neural networks for single image light field synthesis and polyp segmentation from endoscopy images

Author : Jajoria, Kuldeep

Publisher : Gandhinagar: Indian Institute of Technology, 2021

Call No. : 657.38710 JAJ

Acc. No. : T00866

46. **Title** : Evaluation of ultrasound h-scan imaging on tissue-mimicking phantoms

Author : Yadav, Anushka

Publisher : Gandhinagar: Indian Institute of Technology, 2021

Call No. : 629.2293 YAD

Acc. No. : T00856

47. **Title** : Compact model of LDMOS transistors at low temperature

Author : Kuldip, Shah Mansi

Publisher : Gandhinagar: Indian Institute of Technology, 2021

Call No. : 687.910247 KUL

Acc. No. : T00867

48. **Title** : Energy management platform for cooling system: case studies

Author : Kumar, Devesh

Publisher : Gandhinagar: Indian Institute of Technology, 2021

Call No. : 697.9311 KUM

Acc. No. : T00889

MATERIALS ENGINEERING

1. **Title** : Development of landfill barrier from waste material for controlling soil and water pollution

Author : Gahlot, Rohit

Publisher : Gandhinagar: Indian Institute of Technology, 2021

Call No. : 363.739 GAH

Acc. No. : T00928

2. **Title** : Enhanced upconversion luminescence of hexagonal NaYF₄:Yb, Er core nanorods coated with the NIR light harvester NaYbF₄ shell
Author : Sharma, Anurag
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 620.11295 SHA
Acc. No. : T00924

3. **Title** : Atomistic simulations of viscoelastic damping in high entropy alloys
Author : Gadekar, Priya
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 620.16 GAD
Acc. No. : T00927

4. **Title** : Development of high throughput machine learning interatomic potential for high entropy alloys
Author : Longakshi, Bhumika
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 620.16 LON
Acc. No. : T00925

5. **Title** : Study on formability of friction stir welded dissimilar Aluminum alloys AL-6061-Y6 and AL-5083
Author : Dixit, Som
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 620.186 DIX
Acc. No. : T00929

6. **Title** : Effect of chromium and aluminum addition on Nickel-Cobalt binary alloy: study of different strengthening mechanism
Author : Soni, Akshay Kumar
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 620.188 SON
Acc. No. : T00922

7. **Title** : Optimization of process parameters and effect of tool pin profile on friction stir welding of AA 6082-T6 alloy
Author : Shah, Vats
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.1 SHA
Acc. No. : T00930

8. **Title** : Effect of addition of Aluminum and Titanium on the evolution of phase and mechanical properties of high entropy alloys
Author : Das, Sameekshya
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3461 DAS
Acc. No. : T00931

9. **Title** : Effect of the alkaline treatment of pineapple leaf fibres (PALF) on PALF reinforced rice starch bioplastic
Author : Bhadane, Prathmesh Kiran
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 631.587 BHA
Acc. No. : T00926
10. **Title** : Design optimization of torus cryo-pump housing
Author : Jogi, Gaurav
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 671.25 JOG
Acc. No. : T00921
11. **Title** : Effect of friction stir welding process parameters on microstructure and mechanical properties of AA-7075 T6 along with formability analysis and numerical modelling
Author : Shahi, Ankita
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 671.52 SHA
Acc. No. : T00923

MECHANICAL ENGINEERING

1. **Title** : Open die forging simulation of nickel based superalloy nimonic 115 using deform 3D
Author : Jana, Swarup
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 005.365 JAN
Acc. No. : T00905
2. **Title** : Novel implicit roe and roe-MUSCL schemes for hyperbolic conservation laws
Author : Mittakolu, Roshith
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 515.353 MIT
Acc. No. : T00910
3. **Title** : Design, implementation and control of a parallel manipulator for developing virtual force field capability in a gait trainer setup.
Author : Shubham
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 530.032 SHU
Acc. No. : T00918
4. **Title** : Implementation of phase switch monte Carlo method for the melting of crystalline solids
Author : Anilkumar, Chirag
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 530.41 ANI
Acc. No. : T00914

5. **Title** : Energy efficient operation of capacitive deionization
Author : Reddy, Dudyala Rahul
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 535.2 RED
Acc. No. : T00916

6. **Title** : Thin film steady state approximation of melt pool flows and effect of initial surface geometry in pulsed laser surface melting
Author : Mistry, Utsavkumar Jitendrabhai
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 550.1291 MIS
Acc. No. : T00903

7. **Title** : Investigating the feasibility and performance of topological properties towards restoration efforts for perturbed plant-pollinator ecological networks
Author : Dubey, Sarth
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 571.8642 DUB
Acc. No. : T00913

8. **Title** : Piecewise linear dynamics of a cracked beam
Author : Tandel, Vaibhavkumar Dhansukhbhai
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 620.21 TAN
Acc. No. : T00920

9. **Title** : Experimental validation of stability boundaries of a tendon-driven robotic finger with passive compliance and variable end-effector stiffness
Author : Aryal, Sagar
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 621.3164 ARY
Acc. No. : T00919

10. **Title** : Linear stability analysis of boundary layer flow over a heated flat plate
Author : Kavra, Paritosh
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 623.812 KAV
Acc. No. : T00908

11. **Title** : Assessment of the multi-effect membrane distillation system using computational fluid dynamics (CFD) modeling
Author : Das, Rahul
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 624.171 DAS
Acc. No. : T00915

12. **Title** : Development of a cable-driven ankle exoskeleton
Author : Jategaonkar, Chinmay
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 629.4772 JAT
Acc. No. : T00907

13. **Title** : Modelling and planar workspace analysis of cable-driven continuum manipulator
Author : Paranjape, Omkar Dilip
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 629.892 PAR
Acc. No. : T00912
14. **Title** : Sensorless force control- implementation and experimental validation using the WISKI robotic manipulator
Author : Sidhu, Karanbir
Publisher : Gandhinagar: Indian Institute of Technology, 2020
Call No. : 629.892 SID
Acc. No. : T00904
15. **Title** : Assessment of green roof performance in hot and dry climatic conditions
Author : Gupta, Pooja
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 635.9671 GUP
Acc. No. : T00909
16. **Title** : Electrokinetics of polymeric fluids in narrow rectangular confinements
Author : Natu, Aditya Vinayak
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660.11 NAT
Acc. No. : T00906
- 17 **Title** : Design, fabrication and experimental analysis of air gap distillation system
Author : Sivan, Varier Anuj
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 660.283 SIV
Acc. No. : T00902
- 18 **Title** : Performance of ethanol-blended diesel fuel in cool flame reactor for autothermal reforming
Author : Gupta, Shubham
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 662.669 GUP
Acc. No. : T00911
- 19 **Title** : A differential torque controller with velocity and friction coefficient estimation for differential drive robots
Author : Jadhav, Omkar Pratap
Publisher : Gandhinagar: Indian Institute of Technology, 2021
Call No. : 791.43 JAD
Acc. No. : T00917